Functional Movement Profiles Of Police Officers From A Rural U.S. Based Law Enforcement Agency

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Abstract

Police officers may be required to perform dynamic movements such as running, jumping, and lunging as part of their duties. Early identification of poor movement patterns in this population may mitigate injury risks associated with these dynamic movements.

PURPOSE: To profile movement patterns within a police force and identify specific movement patterns associated with injury risk.

METHODS: Thirty-eight (n=38) police officers volunteered to performed squatting, stepping, lunging, reaching, leg raising, upper-body strength, and rotational stability movements.

RESULTS: Surprisingly, 89.7% (n=38) of officers scored below 14 points on their assessment. Greater than 85% (n=33) of officers were unable to perform movement patterns, performed them with compensation, or had pain throughout the movement for six out of the seven movement assessments.

CONCLUSION: SFGS are very physically demanding events that may elicit maximal or near maximal heart rate responses regardless of positon.

Introduction

Oft times, occupational task requirements within tactical groups impose significant physiological stressors in diverse and challenging environments. In order to adequately perform their occupational task, police officers must be able to perform a wide range of movement patterns which may include; squatting, running, jumping, lunging, stepping, and reaching. Poor performance of these tasks may result in an increased risk for injury and decrements in job performance tasks. Studies have shown that

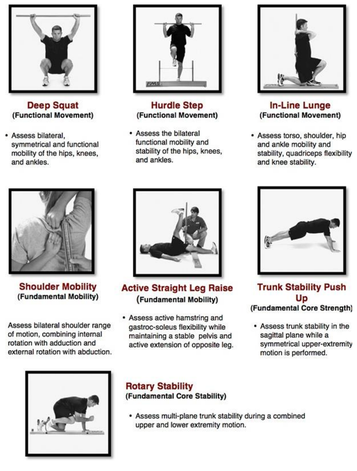
The purpose of this study was to profile common movement patterns, asymmetries, and dysfunction within a rural police force. A secondary purpose of this study was to identify specific movement patterns that may heighten injury risks.

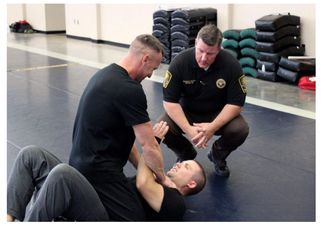
Methods

Subjects: Thirty-eight (n=38) full-time police officers (age: 39.00 ± 9.14; ht: 178.08 ± 6.46 cm. wt: 88.87 ± 13.47 kg) volunteered to participate in this research investigation. Participants movement capacities were assessed by Functional Movement Screen™ certified professionals.

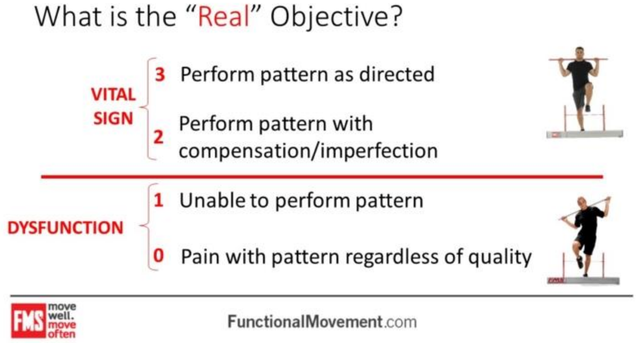
THE FUNCTIONAL MOVEMENT SCREEN

PURPOSE FOR EACH MOVEMENT

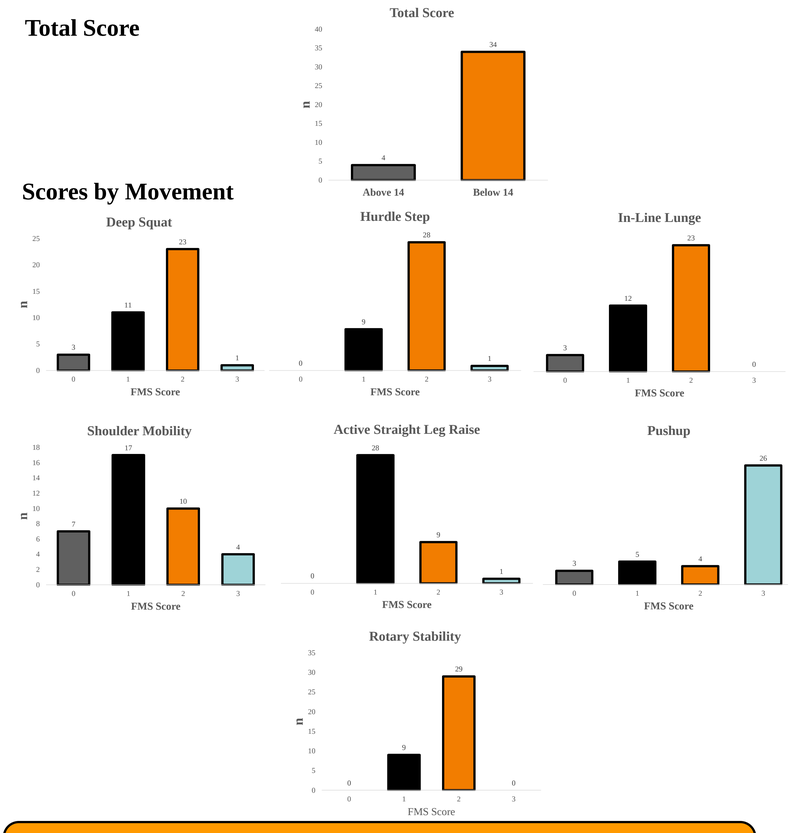




SCORING CRITERIA



Results



Conclusions

Specific movement patterns that may contribute to an increased injury risk within this police population include functional mobility of the hips, knees, ankles, and shoulder. Specific mobility and strength and conditioning programs may reduce injury risk by improving movement quality.

References

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